

WHAT IS CLAIMED IS:

1 1. A method of preventing or treating a disease characterized by amyloid
2 deposit in a patient, comprising administering an effective dosage of an antibody that
3 specifically binds to the amyloid deposit or a component thereof to the patient.

1 2. The method of claim 1, wherein the disease is Alzheimer's disease.

1 3. The method of claim 1, wherein the amyloid deposit comprises
2 aggregated A β peptide.

1 4. The method of claim 1, wherein the patient is a human.

1 5. The method of claim 1, wherein the patient is asymptomatic.

1 6. The method of claim 1, wherein the patient is under 50.

1 7. The method of claim 1, wherein the patient has inherited risk factors
2 indicating susceptibility to Alzheimer's disease.

1 8. The method of claim 1, wherein the patient has no known risk factors
2 for Alzheimer's disease.

1 9. The method of claim 2, wherein the antibody specifically binds to A β
2 peptide.

1 10. The method of claim 9, wherein the antibody is a human antibody.

1 11. The method of claim 9, wherein the antibody is a humanized antibody.

1 12. The method of claim 9, wherein the antibody is a chimeric antibody.

1 13. The method of claim 9, wherein the antibody is a mouse antibody.

1 14. The method of claim 9, wherein the antibody is a polyclonal antibody.

1 15. The method of claim 9, wherein the antibody is a monoclonal
2 antibody.

1 16. The method of claim 14, wherein the antibody is a rabbit antibody.

1 17. The method of claim 1, further comprising administering an effective
2 dosage of a second antibody that binds to the amyloid deposit or a component thereof.

1 18. The method of claim 15, wherein the isotype of the antibody is IgG1
2 or IgG4.

1 19. The method of claim 15, wherein the isotype of the antibody is IgG2
2 or IgG3.

1 20. The method of claim 9, wherein the antibody is a Fab fragment.

1 21. The method of claim 9, wherein a chain of the antibody is fused to a
2 heterologous polypeptide.

1 22. The method of claim 9, wherein the dosage of antibody is at least 1
2 mg/kg body weight of the patient.

1 23. The method of claim 9, wherein the dosage of antibody is at least 10
2 mg/kg body weight of the patient.

1 24. The method of claim 9, wherein the antibody is administered with a
2 carrier as a pharmaceutical composition.

1 25. The method of claim 9, wherein the antibody binds to an epitope
2 within residues 1-28 of A β .

1 26. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-10 of A β

1 27. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-16 of A β .

1 28. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-5 of A β .

1 29. The method of claim 9, wherein the antibody is a human antibody to
2 A β prepared from B cells from a human immunized with an A β peptide.

1 30. The method of claim , wherein the human immunized with A β peptide
2 is the patient.

1 31. The method of claim 9, wherein the antibody specifically binds to A β
2 peptide without binding to full-length amyloid precursor protein (APP).

1 32. The method of claim 1, wherein the agent is administered
2 intraperitoneally, orally, subcutaneously, intramuscularly, topically or intravenously.

1 *Sub 2* 33. The method of claim 1, wherein the antibody is administered by
2 administering a polynucleotide encoding at least one antibody chain to the patient,
3 wherein the polynucleotide is expressed to produce the antibody chain in the patient.

1 *Sub 6* 34. The method of claim 33, wherein the polynucleotide encodes heavy
2 and light chains of the antibody, which polynucleotide is expressed to produce the heavy
3 and light chains in the patient.

1 35. The method of 1, further comprising monitoring the patient for level
2 of administered antibody in the blood of the patient.

1 36. The method of claim 1, wherein the antibody is administered in
2 multiple dosages over a period of at least six months.

1 37. The method of claim 1, wherein the antibody is administered as a
2 sustained release composition.

1 38. A method of preventing or treating Alzheimer's disease, comprising
2 administering an effective dosage of a polypeptide comprising an active fragment of A β
3 that induces an immune response to A β in the patient.

1 39. The method of claim 38, wherein the fragment comprises an epitope
2 within amino acids 1-12 of A β .

1 40. The method of claim 38, wherein the fragment comprises an epitope
2 within amino acids 1-16 of A β .

1 41. The method of claim 38, wherein the fragment comprises an epitope
2 within amino acids 13-28 of A β .

1 42. The method of claim 38, wherein the fragment is free of at least the 5
2 C-terminal amino acids in A β 43.

1 43. The method of claim 38, wherein the fragment comprises up to 20
2 contiguous amino acids from A β .

1 44. The method of claim 39, wherein the fragment is administered with an
2 adjuvant that enhances the immune response to the A β peptide.

1 45. The method of claim 44, wherein the adjuvant and the agent are
2 administered together as a composition.

1 46. The method of claim 44, wherein the adjuvant is administered before
2 the agent.

1 47. The method of claim 44, wherein the adjuvant is administered after
2 the agent.

1 48. The method of claim 44, wherein the adjuvant is alum.

1 49. The method of claim 44, wherein the adjuvant is MPL.

1 50. The method of claim 44, wherein the adjuvant is QS-21.

1 51. The method of claim 44, wherein the adjuvant is incomplete Freund's
2 adjuvant.

1 52. The method of claim 44, wherein the dosage of the fragment is greater
2 than 10 micrograms.

1 53. A pharmaceutical composition comprising an active fragment of A β
2 effective to induce a response to AB in a patient and an adjuvant.

1 54. A method of screening an antibody to A β or an active fragment of A β
2 for use in treatment of Alzheimer's disease, comprising:

3 administering an antibody that specifically binds to A β or a fragment of
4 AB to a transgenic animal disposed to develop characteristics of Alzheimer's disease;

5 detecting a reduction in the extent or rate of development of the
6 characteristics relative to a control transgenic animal.

55. The method of claim 54, further comprising screening a population of antibodies to identify an antibody that binds to an epitope within amino acids 1-28 of A β .

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